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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/631,060	07/31/2003	Stephan Otis Broyles	AUS920030475US1	3508

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EXAMINER

FRANKLIN, RICHARD B

ART UNIT	PAPER NUMBER
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2181

DATE MAILED: 05/15/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/631,060	Applicant(s) BROYLES ET AL.	
	Examiner Richard Franklin	Art Unit 2181	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.


Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☒ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.


 FRITZ FLEMING
 PRIMARY EXAMINER
 GROUP 2100
 AM 1181
 5/12/2006

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>7/31/2003</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1 – 24 have been examined.

Oath/Declaration

2. The oath or declaration is defective. A new oath or declaration in compliance with 37 CFR 1.67(a) identifying this application by application number and filing date is required. See MPEP §§ 602.01 and 602.02.

The oath or declaration is defective because:
Non-initialed and/or non-dated alterations have been made to the oath or declaration. See 37 CFR 1.52(c).

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

3. Claims 17 – 24 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

The claims recite a computer program product in a data processing system. The specification defines a computer readable medium to include “recordable-type media such as floppy disc, a hard drive, a RAM, and CD-ROMs and **transmission-type media such as digital and analog communications links**” (emphasis added). The claim covers an embodiment that fails to include patent-eligible subject matter, since signals waves, such as transmission-type media, or other forms of energy are not deemed to fall within a statutory category of invention.

Claim Rejections - 35 USC § 112 1st Paragraph

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 1 – 24 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The specification and claims recite “processing hardware reset requests ***without utilizing said queue***” (emphasis added). The specification and claims then go on to describe using the queue to process hardware reset requests. There is a lack of consistency in the specification and claims.

Claim Rejections - 35 USC § 112 2nd Paragraph

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 1 – 24 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

6. As per claims 1, 9, and 17, the preamble recites "processing hardware reset requests ***without utilizing said queue***" (emphasis added). However, the body of the claims recites "placing said hardware reset request in said queue" and "processing said hardware reset requests from said queue." It appears that the body of the claims recites utilizing the queue to process the hardware reset requests, which contradicts the preamble. Therefore, the claims are indefinite and for failing to particularly point out the subject matter of the invention.

The Examiner has interpreted the claims to recite using the queue to process the hardware reset requests, as is recited in the body of the claims.

7. Claims 2, 10, and 18 recite the limitation "a plurality of resource cards to reset" in the last phrase in body of each claim. There is insufficient antecedent basis for this limitation in the claim. It is not clear if the limitation is referring to the plurality of resource cards to reset that is recited earlier in the claim or a new set of resource cards to reset.

The Examiner has interpreted the limitation to refer to the plurality of resource cards to reset that is recited earlier in the claim.

8. Claims 3, 11, and 19 recite the limitation "a serial order" in the last phrase in body of each claim. There is insufficient antecedent basis for this limitation in the claim. It is not clear if the limitation is referring to the serial order that is recited earlier in the independent claim or a new serial order.

The Examiner has interpreted the limitation to refer to the serial order that is recited earlier in the independent claim.

9. Claims 5 – 6, 13 – 14, and 21 – 22 recite the limitation "a determination that all of said plurality of resource cards have completed servicing of and pending software communication requests" in the body of each claim. There is insufficient antecedent basis for this limitation in the claim. It is not clear if the limitation is referring to the determination that all of said plurality of resource cards have completed servicing of and pending software communication requests that is recited earlier the parent claim or a new determination that all of said plurality of resource cards have completed servicing of and pending software communication requests.

The Examiner has interpreted the limitation to refer to the determination that all of said plurality of resource cards have completed servicing of and pending software communication requests that is recited earlier in the parent claim.

10. Claims 17 - 24 recite the limitation "instruction means" in the body of the claims. There is insufficient antecedent basis for this limitation in the claim. It is not clear if the instruction means are all the same instruction means or different instruction means.

The Examiner has interpreted the limitations to each refer to separate instruction means.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claims 1 – 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicants Admitted Prior Art (hereinafter AAPA) in view of Japanese Patent Application Publication No. 11-205353 (hereinafter Kuriyama).

As per claims 1, 3, 9, 11, 17, and 19 AAPA teaches a receiving hardware reset requests (AAPA; Description of Related Art: Paragraph 2); and processing software communications request from a software communications queue (AAPA; Description of Related Art: Paragraph 1).

AAPA does not teach placing the hardware requests in the queue; and processing the hardware reset requests from the queue in serial order when all requests from the queue currently being serviced have completed being serviced.

However, Kuriyama teaches receiving a hardware reset request and holding that hardware reset request until all current data transfers are completed. When all of the data transfers are finished, the hardware reset request is processed (Kuriyama Machine Translation; Paragraphs [0021] – [0023]). Waiting for the current data transfers to complete has the same function as placing the hardware reset request in the queue. These functions are the same because both ensure the requests are processed in the order that they are received.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the teachings of AAPA to include adding the hardware request to the queue because doing so would allow the hardware reset request to be processed after the completion of all the preceding requests in the queue.

As per claims 2, 10, and 18, AAPA also teaches that the processor card is coupled to each one of the resource cards utilizing a single reset bus (AAPA; Description of Related Art: Paragraph 2); executing the hardware reset request by the processor card using the reset bus (AAPA; Description of Related Art: Paragraph 2); and resetting all of the resource cards simultaneously in response to the receipt of the hardware reset request (AAPA; Description of Related Art: Paragraph 2).

As per claims 4 – 5, 12 – 13, and 20 – 21, Kuriyama teaches determining if a request is a hardware reset request (Kuriyama Machine Translation; Figure 3 Item S100; Paragraphs [0035] – [0037] [BUS_RESET_CONTROL1]); determine whether all of the plurality of resource cards have completed servicing of any pending software communication requests (Kuriyama Machine Translation; Figure 3 Items S004 – S008, Paragraphs [0038] – [0040]); and waits to execute the hardware reset request until the plurality of resource cards have completed servicing and pending software communication requests (Kuriyama Machine Translation; Figure 3 Items S004 – S008, Paragraphs [0038] – [0040]).

As per claims 6, 14, and 22, AAPA teaches executing a hardware reset request utilizing the reset line bus (AAPA; Description of Related Art: Paragraph 2); and resetting all of the plurality of resource cards simultaneously bus (AAPA; Description of Related Art: Paragraph 2).

As per claims 7, 15, and 23, AAPA also teaches that each one of the resource cards includes a microcontroller and a memory (AAPA; Description of Related Art: Paragraph 1); and resetting the microcontroller in each one of the plurality of resource cards simultaneously in response to the receipt of the hardware reset request (AAPA; Description of Related Art: Paragraph 2).

As per claims 8, 16, and 24, AAPA also teaches that each one of the resource cards includes a microcontroller, a memory (AAPA; Description of Related Art: Paragraph 1), and synchronization bits (AAPA; Description of Related Art: Paragraph 3); utilizing the synchronization bits to maintain information about current servicing of software communication requests by each one of the plurality of resource cards (AAPA; Description of Related Art: Paragraph 2); resetting the microcontroller and the synchronization bits in each one of the plurality of resource cards simultaneously in response to the receipt of the hardware reset request specifying one of a plurality of resource cards to reset (AAPA; Description of Related Art: Paragraph 3); and losing the information about current servicing of software communication requests by each one of

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the plurality of resource cards when the synchronization bits are reset (AAPA;

Description of Related Art: Paragraph 3).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Richard Franklin whose telephone number is (571) 272-0669. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Fritz Fleming can be reached on (571) 272-4145. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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